
**Pink Salmon
Product Development Project
1985-1987**

Boneless-Skinless Blocks and Logs

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June 1993

FOREWORD

The Alaska Department of Commerce and Economic Development is pleased to publish the Pink Salmon Product Development Project Report. This 170-page technical document will be a valuable asset to the salmon industry as it increases efforts to successfully produce convenience-style frozen food products.

The development of value-added pink salmon products is not new. When pink prices were low in the mid-1980's the Alaska Department of Commerce and Economic Development undertook the hands-on development of new boneless, skinless frozen pink salmon products. This report is the result of that project conducted between 1985 and 1987.

Interest in those products evaporated when pink salmon prices tripled in 1988. However, after three years of record low prices with no recovery in sight, interest in these convenience-styled frozen products has been renewed. By increasing our product options for the consumer, it is likely we will increase the demand and price for our fish.

This will not be an easy task. In addition to the requirements for consistent price, supply and high quality there are several formidable production problems that must be overcome which are addressed in this report. Unlike whitefish products, salmon are high in oil content making them more vulnerable to rancidity and other shelf-life shortcomings. They are also more susceptible to bruising and other flesh damage caused by improper handling.

This report discusses these and other issues in great detail including labor and production costs, yield and shelf life for different product forms. Great care is taken in recording quality control factors including microbial levels, color, texture, taste, drip loss and binding strength. Lot grading and sanitation efforts are also described as well as pin-bone removal and refrigeration techniques. The report also details the effectiveness of appropriate processing equipment and anti-oxidants. And finally, the report documents market reception of the pink salmon products made from skinless-boneless blocks and logs during the project.

Because there are several processors planning to produce new pink salmon products this year, the Alaska Department of Commerce contracted to have this report written on the project results so that past efforts could be used to the industry's benefit. The department intends to update this report following the 1993 season and will welcome input from all salmon producers of boneless-skinless salmon products.

This report was prepared by Paul Peyton, former fisheries specialist with the Department of Commerce and Economic Development, who oversaw this project. Peyton is now a fisheries consultant and can be reached for answering technical questions regarding the contents of this report at (907) 586-6070.

Copies of the report can be secured by sending \$9 to the Alaska Department of Commerce and Economic Development, Division of Economic Development, P.O. Box 110804, Juneau, Alaska 99811.

Acknowledgements

I'd like to thank the many people who made this work possible, and apologize to the many whom I fail to mention. This was truly a cooperative effort by many agencies and individuals. In the Department of Commerce, Greg Baker, Karen Tanner, and Dick Reynolds, none of whom is there any longer, and Donna Parker who is and whose support made publishing this report finally possible.

For early guidance on what had already been tried Jerry Babbitt, Jim Barr, Eydfin Tausen, John Lecture and Ken Wong.

Many thanks to the many talented people in the industry who helped produce these products and figure out the problems — the crew at Alaska Fresh Seafoods, especially Dave Woodruff and Matt Moir, the crew at Seafoods from Alaska, especially Roland Schwanke and Gary Ervin, the crew at North Pacific Processors, especially Harmon Blanch and Ken Roemhildt, and the crew at Seafreeze, especially Doug Van Devanter, Danny Delgado, and John McGraw.

For continuing technical and moral support the folks at the National Marine Fisheries Utilization labs in Seattle and Kodiak, especially Herman Groninger and Jerry Babbitt, the folks at the Fisheries Industrial Technology Center, especially Chuck Crapo and Elisa Elliott, and the folks at the Alaska Fisheries Development Foundation, especially Chris Mitchell and Chris Reilly.

For yeoman service in writing and doing a great deal of the detailed production and test marketing work, Harmon Blanch, Doug Van Devanter and Eric Eckholm.

TABLE OF CONTENTS

	Forward	i
	Acknowledgements	ii
	Table of Contents.....	iii
	Introduction	1
I.	Executive Summary	2
A.	History of Pink Salmon Production and Value in Alaska.....	3
B.	Pink Salmon Product Development: Major Milestones	5
C.	Production Conclusions	5
D.	Rancidity Control	7
E.	Product Form	8
F.	Fillet Production Methods	8
G.	Mince Production Methods	9
H.	Market Testing.....	10
I.	Conclusions	12
II.	Production Methodology	13
A.	1985.....	14
	Equipment Used and Handling Procedures	14
B.	1986.....	18
	Production Runs for AFDF/Crapo Stability Studies	18
	Experimental and Production Runs at Seafoods from Alaska	18
	North Pacific Processors.....	20
III.	Product Evaluation and Testing	25
A.	1984 Buyers Standards.....	26
B.	1985 Production	27
	Lot Grading.....	27
	1985 Bacteriological Tests.....	29
C.	1986 Product Evaluation	31
	Seafoods from Alaska Product.....	31
	North Pacific Processors Product	31
IV.	Functional Analysis and Rancidity Control	35
A.	DCED/NMFS Tests	36
B.	Kodiak FITC and NMFS Experiments	39
	Results and Discussion.....	40
	Conclusions	45
	Acknowledgements	45
	References.....	45
V.	Foodservice Market Testing	46
A.	Summary	47
B.	Summary of Results/Projections	51
C.	Recommendations/Conclusions.....	53
VI.	Industry Review	54
A.	Advisory Committees.....	55
B.	NPP Final Report.....	63
VII.	Conclusions	68
A.	Production	69

	B. Marketing	70
VIII.	Appendices.....	72
	Appendix A. Major Food Company Notes	74
	Appendix B. Market Leads and Information	88
	Appendix C. Focus Group Report and Recipes	97
	Appendix D. 86 QC Data	108
	Appendix E. Production Educational Materials	132
	1. Fillet Production	134
	2. Statistical Quality Control	141
	3. Sanitation	153

Introduction

The Alaska Department of Commerce and Economic Development conducted a multi-year evaluation of alternative pink salmon product forms from late 1984 through mid-1987. The major focus was on application of groundfish processing technology to produce boneless, skinless fillet and mince products that could be either reprocessed or marketed directly.

Two years of test production in 1985 and 1986 were test marketed to major food companies and food service sectors directly by the state, and several processors tried the products through their existing channels.

A number of technical studies focused on the problems of shelf life of the intermediate product forms and microbial and chemical analysis of the products. Educational materials were developed based on filleting experience, sanitation problems encountered, and the need for statistical quality control.

The period immediately following the project was one of rapidly escalating grounds prices and diminishing inventories. These took the oversupply pressure off the salmon industry in Alaska and discouraged food companies seeking stable supplies at relatively low prices. As a result, interest in the work faded and no final report was ever issued.

This report collects and disseminates that information. Most of it is still relevant, though some information on specific hardware is dated. Many companies and individual fishermen evaluating alternative salmon products in the current oversupply environment may find that this information pertinent.